

Date: Thursday, 3/8/2007 3:41:01 PM
 User: Kim Johnston

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: GAS SPRING - UNDER REVIEW	
Job Number	: 31149			
Estimate Number	: 12702			
P.O. Number	: N/A	Part Number	: D35527	
This Issue	: 3/8/2007	S.O. No.	: N/A	
Prsht Rev.	: NC	Drawing Number	: D3552 UNDER REVIEW	
First Issue	: N/A	Project Number	: N/A	
Previous Run	: 30638	Drawing Revision	: B	
Written By	:	Material	: N/A	
Checked & Approved By	: <i>07.03.09 J</i>	Due Date	: 3/30/2007	
Comment	: Est Rev.A New Issue 06-11-13 EC			

*OK Rel AS
REV. B
REV C. will ADD
NEW GAS SPRING
PLN 10.02.09*

Additional Product

Job Number:		
Seq. #:	Machine Or Operation:	Description :
1.0	PG	PURCHASING
		
Comment: Issue P/O: <i>3276</i> Purchase Part Number: B8-220-530-70N Supplier: LS Technologies Certificate of conformity is required		
2.0	B822053070N	CARBON STEEL GAS SPRING
		
Comment: Qty.: 1.0000 Each(s)/Unit Total : 20.0000 Each(s) CARBON STEEL GAS SPRING		
3.0	PACKAGING 1	PACKAGING RESOURCE #1
		
Comment: PACKAGING RESOURCE #1 Receive & Inspect For Transit Damage Ensure certificate of conformity is attached		
4.0	QC6	DIMENSIONAL CHECK
		
Comment: DIMENSIONAL CHECK Test for correct pressure		
5.0	PACKAGING 1	PACKAGING RESOURCE #1
		
Comment: PACKAGING RESOURCE #1 Identify and Stock Location: <i>07/3/3 (20)</i>		

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA:  Date: 07/04/04
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Drawing Name: GAS SPRING - UNDER REVIEW

Job Number: 31149

Part Number: D35527

Job Number:



Seq. #: Machine Or Operation:

Description :

6.0 QC21

FINAL INSPECTION/W/O RELEASE



(20)

Comment: FINAL INSPECTION/W/O RELEASE

1/30/04/04

Job Completion



1/30/04/04

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART

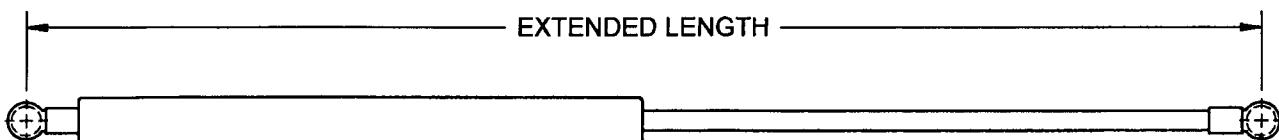
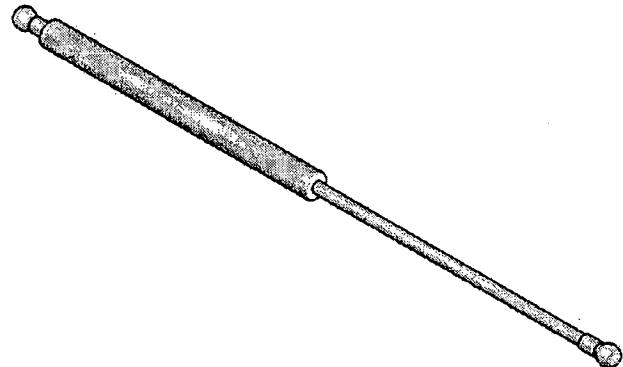
DESIGN <i>CE</i>	DRAWN BY <i>CE</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		
CHECKED <i>PH</i>	APPROVED <i>TH</i>	DRAWING NO. D3552	REV. B	SHEET 1 OF 1
DATE 06.09.15		TITLE GAS SPRING	SCALE 1:1	
REV A	DATE 06.09.15	DESCRIPTION NEW ISSUE		
REV B	DATE 06.10.24	DESCRIPTION ADD D-3552-7/-9; UPDATE DESC. D3552-1/-3/-5		

SPECIFICATION CONTROL DRAWING

UNDER REVIEW

*ST C220 AS
REV 001 P/L*

DART P/N	STROKE (mm)	EXTENDED LENGTH (mm)	FORCE (N)	END FITTING	MATERIAL	LS TECHNOLOGIES P/N
D3552-1	220	530	70	10 mm SS BALL SOCKET	CARBON STEEL	C8-220-530-70N
D3552-3	200	490	200	10 mm SS BALL SOCKET	CARBON STEEL	C8-200-490-200N
D3552-5	175	430	150	10 mm SS BALL SOCKET	CARBON STEEL	C8-175-430-150N
D3552-7	220	530	70	10 mm NYLON BALL SOCKET	CARBON STEEL	B8-220-530-70N
D3552-9	200	490	200	10 mm NYLON BALL SOCKET	CARBON STEEL	B8-200-490-200N



SHOP COPY
RETURN TO
ENGINEERING
D3552-X GAS SPRING

UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 31149

RELEASED
06.12.22 -

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P.O. Box 25032, Saskatoon, Saskatchewan, Canada S7K 8B7
Ph: (306) 683-5000 Fax: (306) 683-6403
E-mail: lstech@lstechnologies.ca www.liftsupporttechnologies.com

Certificate of Compliance

This is to certify that the merchandise listed below meets specifications as required by your order.

B8-220-530-70N CARBON STEEL GAS SPRING

**This product is ROHS compliant
We certify no mercury was used in the manufacture of this order.**

Order # PO00003276

LS Technologies Inv # 3569

A handwritten signature in black ink, appearing to read "Nolan Fehr".



L S Technologies Inc Canada

A handwritten signature in black ink, appearing to read "Nolan Fehr".

Nolan Fehr

LS Technologies Canada Inc.

Box 25032
Saskatoon, SK
S7K 8B7

Packing Slip

Date	Packing Slip #
3/16/2007	3569

Name / Address
Dart Aerospace Ltd 1270 Aberdeen St. Hawkesbury, ON K6A 1K7 Canada

Ship To
Dart Aerospace Ltd 1270 Aberdeen St. Hawkesbury, ON K6A 1K7 Canada

P.O. No.	Rep	Ship Date	Ship Via
00003276	Nolan	3/16/2007	Purolator

Qty	Description
20	B8-220-530-70N Carbon Steel Gas Spring Shipping and Handling PUROLATOR / DHL - Tracking #320331424939 Total GST Business Number: 875007718

Please remit to above address. Thank you for the business.

Jason Murdoch

From: Marc Bellavance [mbellavance@dartaero.com]
Sent: Tuesday, March 27, 2007 10:03 AM
To: 'Jason Murdoch'
Subject: RE: D3552-7

I don't believe that adding the Newton to Pound-Force conversion is a good enough reason for us to revise the drawing, as a simple calculation can do the job.

To convert your metric 70N to imperial pound-force, all you need to do is divide the amount of Newton by 4.488:

For example, $70 \text{ N} / 4.488 = 15.59 \text{ lb}$.

Anyways, the drawing will soon be revised by me to add D3552-11 to the table.
So I'm taking your recommendation in consideration.

Marc Bellavance
Mechanical Designer

DART aerospace Ltd.

Tel: 613-632-5200 Ext. 240

Fax: 613-632-9311

E-mail: mbellavance@dartaero.com

Web: www.dartaero.com

From: Jason Murdoch [mailto:jmurdoch@dartaero.com]

Sent: Tuesday, March 27, 2007 9:50 AM

To: 'Marc Bellavance'

Subject: RE: D3552-7

yes

jmurdoch@dartaero.com

Q.C. COORDINATOR

From: Marc Bellavance [mailto:mbellavance@dartaero.com]

Sent: Tuesday, March 27, 2007 9:49 AM

To: 'Jason Murdoch'

Subject: RE: D3552-7

Jason,

Are you measuring the force of each gas spring when you perform your inspection?

Marc Bellavance
Mechanical Designer

DART aerospace Ltd.

Tel: 613-632-5200 Ext. 240

Fax: 613-632-9311

E-mail: mbellavance@dartaero.com

Web: www.dartaero.com

From: Jason Murdoch [mailto:jmurdoch@dartaero.com]
Sent: Tuesday, March 27, 2007 9:17 AM
To: 'Marc Bellavance'
Subject: D3552-7

How much is 70(N) force in pounds? I think this should be added to the dwg for inspection.

jmurdoch@dartaero.com
Q.C. COORDINATOR